

As a below named inventor, I declare that I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

62 HUMAN SECRETED PROTEINS

the specification of which was filed on October 10, 2000 as Application Serial No. 09/684,524.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s	s):			
	. •		Priority C Yes	<u>laimed</u> No
(Number)	(Country)	(Day/Month/Year Filed)		

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

60/128,693	09 April 1999
(Application Serial No.)	(Filing Date)
60/130,991	26 April 1999
(Application Serial No.)	(Filing Date)

PCT/US00/08979	06 April 2000	Pending
(Application Serial No.)	(Filing Date)	(Status: patented, pending, abandoned)

Full name of first joint inventor:	Steven M. Ruben
Inventor's signature:	Date: 1/20/01
Residence: 18528 Heritage Hills Drive, C	Olney, MD 20832 Citizenship: US
Post Office Address: same as above	
Full name of additional joint inventor:	Jian Ni
Inventor's signature:	1/23/01
Residence: 5502 Manorfield Road, Rocky	Date:
Post Office Address: same as above	ille, MD 20853 Citizenship: <u>CN</u>
same as above	
Full name of additional joint inventor:	George Komatsoulis
Residence: 9518 Garwood Street, Silver S	Date: 26 June Date: 26 June US
Post Office Address: same as above	
Full name of additional joint inventor:	Craig A. Rosen
Inventor's signature:	Date: 1/24/,/
Residence: 22400 Rolling Hills Lane, Layt	onsville, MD 20882 Citizenship: "US
Post Office Address: same as above	
Full name of additional joint inventor:	Daniel R. Soppet
nventor's signature:	Date:
Residence: 15050 Stillfield Place, Centrevi	lle, VA 22020 Citizenship: US
Post Office Address: same as above	

Full name of additional joint inventor:	Yanggu Shi	
(m)	-20 7/20	7/26/0-1
Inventor's signature:		Date: \sqrt{g}
Residence: 437 West Side Drive, Apt. 102, Gai	thersburg, MD 208/8	_ Citizenship: <u>CN</u>
Post Office Address: same as above		
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Full name of additional joint inventor:	David W. LaFleur	
Inventor's signature:	SIM	Date: 1/2/01
Residence: 3142 Quesada Street, N.W., Wash	ington DC 20015	Citizenship: US
Post Office Address: same as above	ington, DC 20013	Citizensinp
Same as above		
Full name of additional joint inventor:	Henrik Olsen	-
Inventor's signature: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(Date: 1/2/01
Residence: 182 Kendrick Place, #24, Gaith	ersburg, MD 20878	Citizenship: DK
Post Office Address: same as above		- ,
		
Full name of additional joint inventor:	Reinhard Ebner	
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Inventor's signature:		Date:
Residence: 9906 Shelburne Terrace, #316, Gait	hersburg, MD 20878	Citizenship: DE
Post Office Address: same as above		
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Full name of additional joint inventor:	Kimberly A. Florence	e
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Inventor's signature:	loune-	_ Date: //26/0/
Residence: 12805 Atlantic Avenue, Rockville,	MD 20851	Citizenship: US_
Post Office Address: same as above		
Full name of additional joint inventor:	Paul A. Moore	
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Inventor's signature: POW A M	orl	Date: $1/26/01$
Residence: 19005 Leatherbark Drive, Germ	antown, MD 20874	Citizenship: UK
Post Office Address: same as above		
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Full name of additional joint inventor:	Charles E. Birse	
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Inventor's signature:	·	Date:
Residence: 13822 Saddleview Drive, North Po	tomac, MD 20878	Citizenship: GB UK
Post Office Address: same as above		

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Full name of	additional joint inventor:	Paul Young		·····
Inventor's sign	nature:		Date:	
Residence:	122 Beckwith Street, Gaith	ersburg, MD 20878	Citizenship:	US
Post Office A	ddress: same as above			

DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

62 HUMAN SECRETED PROTEINS

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Full name of first joint inve	entor:	Steven M. Ruben		· · · · · · · · · · · · · · · · · · ·
Inventor's signature:	. ^		Date:	
Residence: 18528 Heri	tage Hills Drive.	Olney, MD 20832	Citizenship:	US
	ame as above			
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Full name of additional join	it inventor:	Jian Ni	·	<u>`.</u>
	.*			
Inventor's signature:		·	Date:	
Residence: 5502 Manor		kville, MD 20853	Citizenship:	CN
Post Office Address:	ame as above			
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T. 11		~ **		
Full name of additional join	it inventor:	George Komatsoulis	-	
Inventor's signature:			Data	
Residence: 9518 Garw	and Ctreat Cilve	- Caring MD 20001	Date:	110
		r Spring, MD 20901	Citizenship:	US
Fost Office Address.	ame as above			
Full name of additional join	it inventor:	Craig A. Rosen	• "	
an name of additional join	it in action.	Crarg A. Rosen	• • • •	
Inventor's signature:			Date:	
Residence: 22400 Rolli	ng Hills Lane, La	avtonsville, MD 20882	Citizenship:	US
	ame as above		· · · · · · · · · · · · · · · · · · ·	
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Full name of additional join	it inventor:	Daniel R. Soppet		
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Inventor's signature:	ilance!	KAOPPUT	Date: ///	10/
Residence: 15050 Stillf		eville, VA 22020	Citizenship:	US
Post Office Address: s	ame as above			

Full name of additional joint inventor:	Yanggu Shi		
Inventor's signature:		_ Date:	
Residence: 437 West Side Drive, Apt. 102, Gait	hersburg, MD 20878	_ Citizenship:	<u>CN</u>
Post Office Address: same as above	.:		<u></u>
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Tall manner of additional inite inventors.	David W. LaFleur		
Full name of additional joint inventor:	Javiu W. Larieui		
Inventor's signature:		Date:	
Residence: 3142 Quesada Street, N.W., Washi	ngton, DC 20015	Citizenship:	US
Post Office Address: same as above		1	
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Full name of additional joint inventor:	Henrik Olsen		
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Inventor's signature:		Date:	~~~
Residence: 182 Kendrick Place, #24, Gaithe	ersburg, MD 20878	Citizenship:	DK
Post Office Address: same as above			
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Full name of additional joint inventor:	einhard Ebner	•	
run name of additional joint inventor.			<u>-</u> _
Inventor's signature:		Date:	
Residence: 9906 Shelburne Terrace, #316, Gaitl	nersburg, MD 20878	Citizenship:	DE
Post Office Address: same as above	1	•	
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Full name of additional joint inventor:	Kimberly A. Florence	<u> </u>	
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Inventor's signature:	4D 20061	_ Date:	TIC
Residence: 12805 Atlantic Avenue, Rockville, I	VID 20851	_ Citizenship:	US
Post Office Address: same as above	<u> </u>		
Full name of additional joint inventor:	aul A. Moore	•	
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Inventor's signature:		Date:	
Residence: 19005 Leatherbark Drive, German	antown, MD 20874	Citizenship:	UK
Post Office Address: same as above		•	
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Full name of additional joint inventor:	Charles E. Birse		
·		Date	
Inventor's signature:	MD 20079	Date:	CP
Residence: 13822 Saddleview Drive, North Po	iomac, MD 208/8	Citizenship:	GB
Post Office Address: same as above			

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Residence: 18528 Heritage Hills Drive,	Olney, MD 20832	Citizenship:	US
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Full name of additional joint inventor:	Jian Ni		
Inventor's signature:		Date:	
Residence: 5502 Manorfield Road, Rock	cville, MD 20853	Citizenship:	CN
Post Office Address: same as above			
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Inventor's signature:		Date:	
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Post Office Address: same as above		· , - ·	
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Full name of additional joint inventor:	Yanggu Shi		
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Inventor's signature:	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Date:	
Residence: 437 West Side Drive, Apt. 102, C	Saithersburg, MD 20878	_ Citizenship:	<u>CN</u>
Post Office Address: same as above	· · · · · · · · · · · · · · · · · · ·		
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Full name of additional initiations	D		•
Full name of additional joint inventor:	David W. LaFleur		
Inventor's signature:		Date:	
Residence: 3142 Quesada Street, N.W., Wa	shington, DC 20015	Citizenship:	US
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		_	
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Post Office Address: same as above			
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Full name of additional joint inventor:	Reinhard Ebner		
	Troingal a 250001		·
Inventor's signature:		Date: //9	101
Residence: 9906 Shelburne Terrace, #316, G	aithersburg, MD 20878	Citizenship:	DE
Post Office Address: same as above		•	
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Full name of additional joint inventor:	Kimberly A. Florence	· .	
Inventor's signature:		Data	
Residence: 12805 Atlantic Avenue, Rockville	MD 20851	_ Date: Citizenship:	US
Post Office Address: same as above	5, IVID 20051	_ Chizenship.	
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Full name of additional joint inventor:	Paul A. Moore		
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Inventor's signature:		_ Date:	
Residence: 19005 Leatherbark Drive, Ger	mantown, MD 20874	_ Citizenship:	<u>UK</u>
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Inventor's signature:		Data	
Residence: 13822 Saddleview Drive, North I	Potomac MD 20878	Date:	GP
Post Office Address: same as above	Otomac, IVID 20070	Citizenship:	<u>GB</u>

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Full name of additional joint inventor:		Paul Young		
Inventor's sign	nature:		Date:	•
Residence:	122 Beckwith Street, Gaith	ersburg, MD 20878	Citizenship:	US
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Steven M. Ruben		
	Date	
Olney MD 20822		·US
Onley, 1/10 20832	_ Chizenship:	05
		
Jian Ni		
	_	
		
ville, MD 20853	_ Citizenship:	CN
George Komatsoulis		
		•
·	Date:	
Spring, MD 20901	Citizenship:	US
17	-	
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Craig A. Rosen	· ·	•
· · · · · · · · · · · · · · · · · · ·	Date:	
tonsville, MD 20882	Citizenship:	US
Daniel R. Soppet		
	Date:	
ville, VA 22020	Citizenship:	US
	-	
	George Komatsoulis Spring, MD 20901 Craig A. Rosen tonsville, MD 20882 Daniel R. Soppet	Jian Ni Date: Ville, MD 20853 Citizenship: George Komatsoulis Date: Spring, MD 20901 Citizenship: Craig A. Rosen Date: tonsville, MD 20882 Citizenship: Daniel R. Soppet Date:

Inventor's signature: Residence: 437 West Side Drive, Apt. 102, Gaithersburg, MD 20878 Citizenship: CN Post Office Address: same as above Full name of additional joint inventor: David W. LaFleur Inventor's signature: Date: Residence: 3142 Quesada Street, N.W., Washington, DC 20015 Citizenship: US Post Office Address: same as above Full name of additional joint inventor: Henrik Olsen Inventor's signature: Date: Residence: 182 Kendrick Place, #24, Gaithersburg, MD 20878 Citizenship: DK Post Office Address: same as above
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Inventor's signature: Date:
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Same as above
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Post Office Address: same as above

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Full name of	additional joint inventor: Paul Young	
Inventor's sign	nature: ALEYX	Date: 1/22/01
Residence:	122 Beckwith Street, Gaithersburg, MD 20878	Citizenship: 'US
Post Office Ad	ddress: same as above	

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Ruben, Ni, Komatsoulis, Rosen, Soppet, Shi, LaFleur, Olsen, Ebner, Florence, Moore, Birse, and Young hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention(s) known as 62 Human Secreted Proteins for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 1/26/01, 1/23/01, 1/26/01, 1/26/01, 1/26/01, 1/26/01, 1/26/01, 1/26/01 (also known as United States Application No. 09/684,524, filed October 10, 2000), in any and all applications thereon, in any and all Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Inventor's Signature:_	Abulale	Date:	1/26/01
-	Steven M. Ruben		, 2
Inventor's Signature:_		Date:	1/23/01
Inventor's Signature:_		Date:	1/2601
Inventor's Signature:_	Cyaig A. Rosen	Date: _	1/29/11
Inventor's Signature:_		_ Date:	
	Daniel R. Soppet		,
Inventor's Signature:	YangguyShi	Date: _	1/26/00
Inventor's Signature:_		Date: _	1/26/01
Inventor's Signature:	11 :	Date: _	1(26/01
Inventor's Signature:		Date: _	
Inventor's Signature:	Reinhard Ebner Solution Kimborly Florence	Date:	1/26/01
Inventor's Signature:	Pau A. Moore		1/24/01
Inventor's Signature:	Paul A. Moore Charles E. Birse		01/20/01.
Inventor's Signature:	· · · · · · · · · · · · · · · · · · ·	Date:	
	Poul Vous		· · · · · · · · · · · · · · · · · · ·

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Ruben, Ni, Komatsoulis, Rosen, Soppet, Shi, LaFleur, Olsen, Ebner, Florence, Moore, Birse, and Young hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

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Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Inventor's Signature:_		Date:	
	Steven M. Ruben		
Inventor's Signature:		Date:	\mathcal{F}_{i}
	Jian Ni		
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Inventor's Signature:	George Komatsoulis	Date:	
	Ocorge Homatsouns		
Inventor's Signature:		Date:	
	Craig A. Rosen	•	
Inventor's Signature:	Daniel Roppet.	Date: //	119/01
	Daniel R. Soppet		
Inventor's Signature:	Yanggu Shi	Date:	· · · · · · · · · · · · · · · · · · ·
	Tangga om		
Inventor's Signature:		Date:	
:	David W. LaFleur		
Inventor's Signature:		Date:	
	Henrik Olsen		
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Inventor's Signature:	Reinhard Ebner	Date:	· · · · · · · · · · · · · · · · · · ·
•	Telimar & Done.		
Inventor's Signature:		Date:	
	Kimberly Florence	•	
Inventor's Signature:		Date:	
	Paul A. Moore	.	
t and the Otto and a	141	Data	
Inventor's Signature:	Charles E. Birse	Date:	,
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Inventor's Signature:		Date:	· · · · · · · · · · · · · · · · · · ·
	Paul Young		

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- (a) in and to the invention(s) known as 62 Human Secreted Proteins for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 01/19/01

 (also known as United States Application No. 09/684,524, filed October 10, 2000), in any and all applications thereon, in any and all Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

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Inventor's Signature:	11	Date:	•
	Steven M. Ruben	Date	
Inventor's Signature:	•	Data	
	Jian Ni	Date:	,
Inventor's Signature:		.	
<u></u>	George Komatsoulis	Date:	
Inventor's Signature:	*	5	٠.
	Craig A. Rosen	Date:	
Inventor's Signature:		.	
	Daniel R. Soppet	Date:	
Inventor's Signature:			•
	Yanggu Shi	Date:	<u> </u>
Inventor's Signature:		ъ.	
<u></u>	David W. LaFleur	Date:	
Inventor's Signature:	·•	D-4	
<u> </u>	Henrik Olsen	Date:	
Inventor's Signature:	y Unes	Date: //	19/01
	Reinhard Ebner	Date:	4/01
Inventor's Signature:		Data	•
. •	Kimberly Florence	Date:	
inventor's Signature:		Date:	
. ,	Paul A. Moore	Date.	
nventor's Signature:		Date:	
	Charles E. Birse	Date	
nventor's Signature:	4	Date:	
	Paul Young	Date.	

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	Steven M. Ruben	Date:
Inventor's Signature:		
	Jian Ni	Date:
Inventor's Signature:		
	George Komatsoulis	Date:
Inventor's Signature:		,
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Inventor's Signature:		*
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Inventor's Signature:		
	Reinhard Ebner	Date:
Inventor's Signature:		
	Kimberly Florence	Date:
Inventor's Signature:	•	
<u> </u>	Paul A. Moore	Date:
Inventor's Signature:		
<u> </u>	Charles E. Birse	Date:
Inventor's Signature:	1/// 10	
	Paul Young	Date:/22/01
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